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# Effects on Hotel Customer Service Based on Growth in Technology

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Effects on Hotel Customer Service Based on Growth in Technology

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**Abstract**

This study will be concentrating on the effects of technology on customer service quality in the hotel industry. The purpose of this research is to measure the satisfaction of the guests based on the growth in technology in a hospitable setting. The customer guest satisfaction ratings and responses for this research will be based on a pilot study conducted by convenience sampling. The participants in this study are guests that have visited one of the top hotel chains in the world. The method of convenience sampling is used due to the opportune surveys that are sent to guests inquiring their experience during their hotel visit. The results of this study will reflect the responses given by the participants in the pilot study based on their interaction with hotel technology. The guest satisfaction and effects on customer service based on technology will only represent the population of this pilot study, leaving room for additional research pertaining to technological growth.

*Keywords:* technology, satisfaction, hotel

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### **Introduction**

The focus of this research are the effects that technology has placed on guest satisfaction in the hotel industry. The research will pinpoint the main operational departments reflecting apparent technological growth while affecting customer service satisfaction, front desk and sales and marketing. Technology has grown substantially over the last decade, maintaining an equal growth rate with the trends of society and corporate America; measuring guest satisfaction from these evolving trends can provide pertinent information on providing exceptional customer service. The hospitality industry has adapted to these technological advancements as they are becoming implemented into different hotel establishments: virtual marketing, keyless entry, online booking and mobile check-in are a few of the upgrades affecting customer service through the front desk and sales departments. The advanced areas of technology have requested feedback on guest satisfaction surveys to adjust the growth of technology accordingly; dependent upon the feedback received, customer service and operational areas of a hotel will shift to meet the customer's needs.

The research in this study will examine how guest satisfaction has been affected by technology, resulting in how the hotel guest perceives customer service. The purpose behind this study is to determine if new age technology has had any impact on the customer service and experience that a hotel guest receives. The basis on conducting research on the development of technology will provide imperative results to providing the guest with an extraordinary experience and prevent detrimental technological advancements at the risk of losing revenue and customers. This research study questions which part of technology has had the most impact on customer service, what technological advancements have been implemented in the operational

departments and how can the customer service improve based on results from guest satisfaction surveys.

The importance of exploration into the progression of technology for the hotel industry is to prepare for future installations and continuously achieve guest gratification through technological amenities. As trends in upcoming generations are transferred to corporate establishments, performance and digital operations mold to the customer's expectations. As the needs and wants from generational movements have grown further into the future, technology advancements have reflected this growth in the hospitality industry. Limitations relative to this study circulate around the pilot study with convenience sampling. The questions on the survey will only provide the hotel with limited information involving technology; this will not provide the full scope of how and what technology has affected each guest. The convenience sampling provides feedback from a large random demographic of guests, failing to concentrate on a target group of guests that have potential to be affected by the study more. The nature of this study is based on quantitative research recovered from guest satisfaction surveys; as operations and technology grow, the surveys will reflect opportunity for future research based on customer responses.

### **Literature Review**

Located throughout these articles are examples of technology that has been changing and morphing different areas of the hotel industry and how it will be perceived by guests.

Technology has been paving the way for guests to check in and perform any task relative to their stay while at a hotel; the introduction of self-service technology and convenient customer service procedures have impacted the guest experience. The recent implementations of digital technology have spread globally, impacting customer service procedures variously at different

hotel establishments. The articles will follow diverse areas with different types of technological exercises and how they are perceived.

The article *Readiness of Upscale and Luxury-branded Hotels for Digital Transformation* (Lam & Law, 2019, p. 60) discusses hotels located in Asia that were being evaluated and gauged for the implementation of digital technology. Transforming fully functioning hotels into more convenient and tech savvy establishments bring the guests and employees into a new era of hospitality. “Hotels need to go through digital transformation to meet the changing demands of customers in the experience age and stay ahead of both traditional competitors and industry disruptors in the exponentially-evolving competitive environment” (Lam et al., 2019, p. 60). The article explains how developing digital technology into these hotels will change data and customer perceptions. Lam and Law (2019) present different studies on the outcome of the research and future ideas for research in this field.

Used for their methodology, Lam and Law (2019) utilize qualitative research based on in-depth interviews. The basis behind their process was to understand where the employees and the status of technology in the hotel stand. The participants that were involved in the study included the top IT directors and individuals that work for Marketing and Sales within the hotel; these individuals would be working closely with the implementation of digital technology and could provide information useful for this study.

The interviews with the property-level respondents revealed both the IT and S&M cohorts in the sample had very superficial knowledge on the system and of each other’s challenges in the digital era. Little professional communication and exchange occurred between the two groups (Lam et al., 2019, p. 65).

The findings resulted in the conclusion of expanding training for multiple hotels and defining the eras that are point of concentration before the digital age of technology takes over all hotels.

A secondary article relevant to hotel technology growth, *Preparing Hospitality Organizations for Self-Service Technology* (Lema, 2009) opens up the ideas of self-service and newer technology into the hotel industry. This article breaks down the insistence of this self-service approach through insight from customers and employees. Self-service technology has spread into numerous different outlets, from grocery stores to pharmacies; the millennial generation has been paving a new path of independence and technology friendly applications over the past several years, yearning for developments such as self-service. “Technology in hospitality organizations has provided much of the success over past challenges with self-service strategies, although human capital investment is required to match personal characteristics necessary to maximize the full potential of self-service benefits” (Lema, 2009, p. 154). This article encompasses the reaction of employees and customers to a new digital age of self-service technology and the effects on the hotel industry from this development.

The study conducted in this article applies primary research using convenience sampling. The motive is to find out if self-service technology will be beneficial for users among hospitable environments. The convenience sample utilized numerous hospitality workers in the general area to partake in a survey that would provide feedback relevant to self-service technology. The model of the survey essentially based employee’s self-directive and self-readiness to determine if self-service technology could be used in given areas.

Organizations that are able to incorporate self-directed learning concepts into their self-service processes may benefit by delivering successful programs to their employees and their customers. With further understanding in the differences of self-directed learning



readiness, measurement, and benchmarking procedures among participants, hospitality organizations have an opportunity to gain competitive advantages (Lema, 2009, pp. 165-166).

Another significant article pertaining to hotel technology growth, containing international studies and results toward the implementation, *Can self-service technologies work in the hotel industry in Singapore? A conceptual framework for adopting self-service technology* (Isis, 2010). This article focuses on the customer's perspective on growing technology in the hotel industry. The beginning of the decision-making process and during the installation of self-service applications are researched, along with reactions and affects to the hotel employees and guests. The focus of the research is the proven productivity and increased customer satisfaction with the performance of this technology.

From the customer's perspective, the rapid proliferation of SSTs offers a number of advantages and disadvantages. Most customers are happy to serve themselves with the help of SSTs when they see an added advantage to using this technology. Some of the potential benefits of using SSTs include time savings from the reduced waiting times, cost savings, and a greater control over their service delivery (Isis, 2010, p. 19).

The methodology used was primary research conducted through a pilot study, hosting numerous testing trials with customers on their perception on different types of technology. After the trials and phases were complete with this study, it was concluded that self service technology would have a beneficial impact on the hotel industry in Singapore. The customers feedback reflected demand for upgraded and more challenging technology. The potential of activation of new technology will extend further than hotel guests, but affect the hotel internally with positive performance.

### **Methodology**

The methodology used in this research is organized through primary research. A pilot study was conducted through convenience sampling. The research data found was quantitative, but with a customer comments and ratings per their guest satisfaction experience (see Appendix A). The participants in this study consisted of hotel guests of a large mid-scale, hotel chain located in the Southeast Region of the United States; the surveys that were taken and reviewed date back from December 2017 to April 2019. Each guest that attends the hotel, whether it be for a conference, dining experience, or an overnight stay, is emailed a customer satisfaction survey and given 48 hours to reply back with their experience. The survey covers numerical and descriptive data described by the guest; the survey supplies a ranking system where the guest shows the value of their stay numerically, and a letter box for any other comments (see Appendix A). The main geographical location of the participants in this study are centralized in the southeast region of the United States; since the surveys are given to every hotel guest, there will be some outliers mixed in the guest population. The surveys are given to hotel guests to provide feedback on multiple areas within the chosen establishment; different departments and operations offer a scale for guests, along with a written feedback section. The information provided through these surveys is what fuels the hotel to prepare for future stays, prevention tactics, hotel changes, praise and a relationship with the guest.

The guest satisfaction responses that were collected during this study are representative of the total of 11,578 guest surveys; out of the 11,578 given surveys, 1763 responses were rendered, resulting in a 15.2% response rate and a model for the population, per the central limit theorem (Cooper & Schindler, 2003, p. 207). During the research, 39 surveys were used out of 1763 to measure any customer service comments that were technology related; 2.2% of the

surveys were used during this pilot study for sampling. The sample population that was provided through convenience sampling will represent customers of hospitality establishments in the general area of the southeast; the sample will directly represent hotel guests over the span of 16 months. Every survey that was given to a participant in the study provided the same information and questions from the first survey researched in December 2017.

The validity of this study is relevant and accurate. The research in this study concentrates on how technology has affected customer service in this hotel industry; the survey questions measure certain areas of the guests stay correlating with their technology experience to provide compatible information for this study. Internal validity would be essential to a study of this nature: “Internal validity: This asks whether the questions we pose can really explain the outcome we want to research” (Mora, 2011, par. 6). The survey asks the guest questions related to the entirety of their stay; if the questions were strictly pertaining to technology, the response would relate internally. The reliability of this research study is low. The responses that are provided do not necessarily correlate with information needed to base customer service ratings on technology. A survey that is strictly technology based would provide high reliability to this research study, given responses that relate to the general study.

The results from this study will provide descriptive data on the effects of technology related to customer service in the hotel industry. The pilot study based on customer satisfaction surveys was the most beneficial and analogous research method to acquire this information. There are considerable limitations and implications related to this study; however, the findings provide solid feedback from the perspective of the hotel guest.

### Findings

The results in this pilot study show that majority of hotel guests have had a negative experience with technology in hotels. The convenience sample of guest satisfaction surveys that were acquired from December 2017 to April 2019 totaled to 11,578 guest surveys. Out of 11,578 surveys, 1763 total guest surveys were answered and returned to the hotel database, resulting in a guest response rate of 15.2%. There were 39 responses that were pertinent to this study, resulting in a sample size of 2.2%; therefore, the central limit theorem may be applied. 36 out of the 39 responses that were given by guests included complaints relative to: their digital key cards deactivating, their digital key card not working for their room and the parking garage together, the internet speed being too slow or non-existent, online booking and check-in not matching their original reservations and the reservation computer system continuously being down. 3 out of the 39 surveys commented on their positive reaction to Netflix being installed in the newer guest television systems and how easy and convenient mobile check-in made their arrival.

Another discovery from the research shows a high percentage of guests only leave a comment reflecting their experience if it is negative. Based on the findings of this research, guest satisfaction and customer service reviews could differ substantially if a survey was completed by all guests. The responses generated from the surveys only reflect the area the guest was mostly affected by, leaving numerous opportunities for other departments and experiences to go unnoticed. Future research has potential to provide differentiated results based on survey questions and response size.

### Limitations

During the research design, limitations that were present correspond with the questions on the survey, age demographics and response rate. The questions on the survey are prepared in a

generalized form inquiring about the entire hotel experience; if the questions on the survey were strictly related to technology applications and improvements, the responses would reflect a more accurate representation of the customer service experience in this field. The layout of the surveys gives the guest a rating system to rate the different departments on their performance, resulting in a numerical value; however, the results from the quantitative data received does not inform the hotel what part of technology was the reasoning behind the rating.

Generational gaps may alter results on a survey depending on their perception of technology; the age demographics in generational gaps can show the variance of how technology is anticipated. Millennials prefer new age technology and a convenient self-service atmosphere while traveling; older generations prefer face to face interaction and a simplistic technological application. Millennials have become more reliant on technology and group sharing, resulting in a different travel experience than an older generation. The hotel location and target market could determine different results based on their customer base; newer technology would attract Millennials, which would produce a more positive customer service outcome based on their wants and needs.

The response rate on guest satisfaction surveys can limit the outcome of final research results. The response rate used for the pilot study was 15.2%; with a higher response rate, the findings and conclusion of the study could have been determined differently. The findings show negative feedback towards technology use in hotels, but with a higher response rate, the results could alter to provide more positive comments. A lower response rate would most likely determine the same results as this study, but with fewer positive comments.

### **Implications**

The findings in this study determine the use of newer technology in the hotel industry does not benefit customer service. Shown from the results in the study, most people left negative feedback concerning technology upgrades in the hotel; these results leave room for debate and research the adaptability of hotel guests to technology as the industry moves into the future. It is common for guests to only comment on a survey if their experience was bad, but this leaves little to no information for the establishment to balance the act of great customer service.

Negative feedback can be difficult to avoid, as people who've had notably negative (or positive) experiences are more likely to post reviews than those who had only satisfactory experiences. What's more, a good review might require everything to go right during your guest's visit while a negative review may only take a single, frustrating mistake.

However, hotel management can take a proactive approach by responding to reviews in a timely manner. Doing so allows you to improve your online brand reputation and collect useful feedback about a customer's experience (Tam, 2017, pars.4 & 5).

The findings from this research entail customers need for convenience, productivity and proactive performance; technology that can simply be used at the guest's discretion, that will be productive and quick. Stepping into the future, more studies may be conducted on future technological advancements placed in the hotel industry, and hospitality industry as a whole. Studies for researchers can include the technology in corporate hotels versus franchises; guest experience will reflect future installments in both establishments. The results from this pilot study reflect one mid-scale hotel chain, leaving opportunity for future research to be placed in remaining hotel chains worldwide.

### **Conclusion**

The modern advancement in technology applications have not benefitted customer service based on this pilot study. The pilot study shows out of all departments inquiring feedback on the satisfaction survey, technology received a small percentage of comments; majority of the comments received were negative. Technology has been placed in hospitality industry, advancing years at a time; however, shown from the research results, the adaptability process is slower in pleasing all hotel guests. As more research is conducted and technology is placed in areas of guest satisfaction, customer service will reflect the movement. This research was conducted on a small scale, leaving more studies and their results to shift the basis of this outcome.

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## Sample guest satisfaction survey

Time stamps are US Eastern Time. Date Format is US (MM/DD/YY).

## Guest Satisfaction

### GSS: Intent to Recommend Property



### GSS: Overall Satisfaction



### Intent to Consider Brand



### Check-in Experience



Property (Exterior and Interior)  
Overall



Stylish and Up-to-date  
Design/Décor



## Maintenance and Upkeep



Lobby Area



## Staff Service Overall



## Elite Appreciation



## Anticipation of Needs



## Room/Suite/Apartment

Room Overall



Room Cleanliness	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	7	8	9	10	
Bathroom Overall	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	6	7	8	9	10
Comfort of Bed	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	6	7	8	9	10

## Amenities/Services

F&B: Satisfaction	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	9	10	
Internet speed and performance	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	8	9	10

## Continent/Brand Specific Questions

MH: Bar/Lounge Energy & Ambiance	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div>8</div><div></div><div></div><div></div><div></div></div>	9	10
MH: Feel Inspired/Creative	<div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div>6</div><div>7</div><div>8</div><div>9</div><div>10</div><div>N/A</div></div>		

## Problems

## RESTAURANT MEASUREMENT

Restaurants Eaten At: Rocks at Midlands' Lounge

Restaurant 1 Name: Rocks at Midlands' Lounge

Restaurant 1 Cuisine Type: Southern

Restaurant 1 Service Satisfaction:	1	2	3	4	5	6
Restaurant 1 Food Quality Satisfaction:	1	2	3	4	5	6

## Comments

## GSS: Overall Review Comment

This hotel needs an upgrade...the common space has already been upgraded, but the rooms need work... curtains are old and too long, desks are old, bathroom ceiling needed painting, caulking needs work... you get the point...

## Keywords

hotel need hotel upgrade common space already space upgrade room work curtain old too curtain long long desk curtain old desk bathroom bathroom ceilingcurtain need need paint need caulk need need paint work you get you point

## Additional Information

Guest Reported Amenities/Services Usage

Internet

No
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